Verbal Morphology and the Evolution of Language

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Abstract

The world's languages show great variety and there has been a loss of faith in the idea that they all have the basic structure. Our suggestion here is that they are indeed rather different in structure, but that the end result in terms of meaning is essentially parallel across the world's languages. In other words, there is no Universal Grammar but there is a fundamental psychic unity among human beings, the result of millions of years of evolution. We compare and contrast five languages to demonstrate this main point, focusing on verbal morphology, the contribution of tense in particular. We treat language as a fully symbolic sign system, with phonology, syntax, and semantics. Therefore, we have no need to make reference to movement operations. Similarly, we have no need for functional categories such as tense or agreement phrases. As we have no such movement operations, we do not claim that differences in structure can be made to disappear. These languages are fundamentally different in structure, but they are all working towards the same final goal, the expression of meaning, in an attempt to invoke a mental simulation by the listener.

Keywords: Evolution; Verbal Morphology; Semantics

Introduction

With over 6,000 languages spoken internationally, a constant object of wonder is how and why such disparate languages came into existence. Although distinct in form, we make the claim here that all languages have fundamental similarities. The worlds' languages cannot be isolated from the context of human evolution, with language having perhaps evolved over a period of 5 million years. Our basic perception of the world, characterizable as the psychic unity of humanity, is to see life in terms of situations and objects in these contexts. The worlds' languages, we claim, reflect precisely this unity of perception. Linguistics, then, may be understood in these terms. Linguistic items map on to these situations (verbs) and objects (nouns), bound by meaning and context. The way we see objects is determined by what we can do with them, as proved by the tool-based culture of early humans. In other words, then,

there exists a fundamental cognitive human template reflected in all human languages. This henceforth forms our cognitive framework. Although languages may differ greatly in form, similarities are anchored in the general universal human experiences we share. In this paper, English, Mandarin, Cantonese, Japanese, and Tagalog are compared and contrasted in terms of their verbal morphology. We show that, while languages may be very different in structure, they all act as tools to achieve the same general goals.

1. English

While the Generative Grammar tradition in modern linguistics has focused on movement operations affecting syntactic formulae as a way of demonstrating that the world's languages are structurally the same, there is strong evidence to suggest that linguists and cognitive science are now abandoning this theoretical position (Evans, 2016; de Bot, 2015; Ibbotson, 2020; Ibbotson & Tomasello, 2016). In line with these developments, we take the position that millions of years of evolution has resulted in a fundamental "psychic unity" of mankind. All human beings, regardless of culture or race, share the same basic psychological and cognitive make-up. We are all of the same kind. However, we also assume that the world's languages are actually very different in structure, even though they all seek to accomplish the same basic task of communicating by conveying mental images (understandable as simulations) via semantic frames that carry encyclopedic information about signs.

In English, a non-finite, base-form verbal lexeme such as *kick*- combines with a past affix -ed to form a finite verb form. This has subcategorization or valency requirements such that it takes two noun phrases, the referential indexes of which appear in the semantic information. This semantic structure is represented below in terms of semantic frames, essentially the encyclopedic information associated with the sign. The -ed past affix contributes the information that the situation took place in the past, while the referential indexes x and y form a part of this encyclopedic information, indicating the commonsense notion that there are two iconic participants in a kicking event.

2.

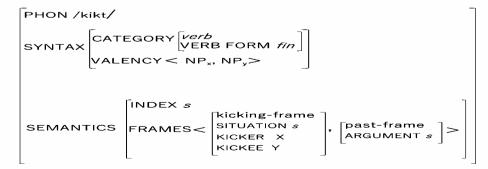


Figure 1: Semantic Structure Representation

Verbal morphology of English has past-form affixes attaching directly to non-finite verbal lexemes (just as is the case in Japanese, e.g. *tabe-ta*). However, other languages may have different ways of conveying communicative information of this sort. This issue is addressed in other sections of this paper. Chinese languages, for example, employ adverbials to convey tense-related information. However, while the adverbial in Cantonese and Mandarin affix at a different syntactic level (to a verb phrase rather than to a base form lexeme), the end result is essentially the same.

With respect to English, we may assume that past participle forms such as *eaten* do not form fully finite verbs and therefore are prevented from taking subjects.

3. *John eaten sushi.

However, we may assume that the auxiliary *has* combines with *eaten* to create a fully finite verb form, while contributing appropriate agreement and case constraints. This can be handled via specifications for auxiliary *has* as follows:

4.

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PHON /hæz/

SYNTAX CATEGORY [verb | VERB FORM fin ]
VALENCY < NP<sub>x</sub>[NOM]<sub>[3rd, sing]</sub>, VP[inf]:<sub>INDEX S, VAL<NPx></sub>] >

SEMANTICS [INDEX s | Immediate relevance-frame | ARGUMENT s ]
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Figure 2: Auxiiary has specifications

Specifications in (4) guarantee that that the auxiliary takes a nominatively case-marked, third person singular subject that is structure shared with the unrealized subject of the inf VP complement.

- 5. a. *Him has eaten sushi.
 - b. *They has eaten sushi.

The semantic information for has eaten sushi will be assumed to contain at least the following:

6.

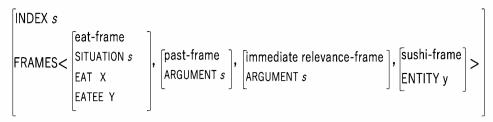


Figure 3: Auxiliary has semantics

The semantic information carried by the auxiliary in (6) correctly guarantees that the situation of utterance will be interpreted as of immediate relevance to the listener. No movement operations are required in our analysis, and hence we have no need for functional categories such as Tense or Agreement Phrase etc. All relevant information is carried in the internal structure of signs. Lexical items combine in different ways, but contribute meaning in essentially the same way.

We assume that all of the world's languages have verbs and nouns (or analogs of these) in order to convey information about events in the world. However, we leave open certain questions: whether certain utterances must be construed as explicitly relevant to specific situations or not, for example, may be a matter related to culture and the historical development of the language in question.

2. Mandarin

Introduction

Compared to other languages, Chinese may be considered a combination of many languages and dialects rather than a single language such as English. Thus, Chinese language also possesses various features of these languages and dialects. Among all the languages that belong to the Chinese family of languages, Mandarin may be regarded as the most representative one. Mandarin was created as a standardized form and popularized when the People's Republic of China was founded in 1949. In other words, Mandarin is the language created to standardize Chinese languages and dialects. Mandarin is created based on north Chinese dialects, especially languages used around the Peking area. Mandarin mainly refers to the speaking system and grammatical system. In terms of writing systems, Mandarin adopted simplified Chinese as a writing system rather than a traditional one. In this part, we will focus on the verbal morpheme changes and tense in Mandarin.

The Analysis and Understanding of Mandarin Verbal System

Different from other western languages, Chinese does not have inflectional variations regarding verbal forms. In other words, there are no inflectional changes in Chinese, as suggested above.

The way of changing tense in Mandarin is to add relevant time adverbial items before or after the verb to indicate different tense. Then, how do we show the influence of tense on verbal morphemes in mandarin? Let us analyze this case: a. 我吃早饭(I eat breakfast)In this sentence, "吃" is the verbal morpheme which means "eat". It is also the basic form of eating. Compared to tenses of English, there are also many time adverbs which are used in order to show different tenses in Mandarin.

Table 1: Verbal Morphemes of eat

Tense	Chinese verb	English meaning	Functional part	Necessity to add time adverb	Time adverb examples	English meaning
present	吃	eat	-	No need to add	-	-
progressive	正在吃	eating	正在	No need to add	正在	Now/
future	将(要)吃	Will eat	将要	Usually add	-	-
past	吃了	Ate	了・完了	Usually add	刚才	Just now
perfect	吃完了	Have eaten	完了	Usually add	已经	Already

As shown in Table 1 above, when expressing a sentence in the progressive tense, the functional part is needed to add before the basic form of the verb. Thus, the sentence "我正在吃旱饭" (I'm eating breakfast) can be understood as the expression of progressive tense in Mandarin. "正在" is the functional part similar to a prefix. However, in terms of fixed structure, it may be understood as being more similar to "be -ing". Except for structural function, 正在 can also be considered as a time adverb which indicates the meaning of "now" in English.

To express the meaning of an action that will happen in the future, the signal words "将要" (jiang yao) or "将" is used before the verb. "我(将要)吃早饭" means I will eat breakfast. Because the word "jiang yao" can be omitted in most situations, it tends to confuse many foreigner learners. In these situations, time adverbs become the mark of tense such as "一会儿" (later) or some specific time. As Mandarin is an analytic language, semantics and meaning of tenses often do not show up in a clear way. It is necessary to understand the implied meaning that is arrived at in contexts. For example "我吃早饭" (I eat breakfast) as shown above, indicates the present tense. However, if a specific time in the future is added in the sentence, it will become a sentence that indicates the future tense. Adding a specific time 7 o'clock as time adverb in the sentence the sentence will become: 我(在)7点吃早饭 which means "I will eat breakfast at 7 o'clock" and this sentence can be used as the reply to a question sentence such as: When are you going to eat breakfast? Meanwhile, this sentence can also be considered as the answer to "What time do you eat breakfast every morning?" It depends on the context in Mandarin.

As for the expressions that imply past tense, they are more obvious than future tense. Except for adding relevant past time adverbs, usually the character "了"(le 4) is added after the verb to indicate a meaning that the action happened in the past. For example, the sentence "我吃了早饭" means "I ate breakfast". The character "le" combines with the basic form "吃" of eat

here changing into the phrase 吃了 to express that the action of eating happened in the past. The character "le" is often called an empty word because in Mandarin it can not be used singly and it does not possess an overtly obvious specific meaning. This character can be only continued after a verb like the function of suffix to indicate the action happened in the past or that it has happened. According to Yeh, Hsin-hung (2020) the character "le" is also called perfective. He categorizes "le" as a type of tense-functional suffix. There is another type of verbal expression that contains the implied meaning that the action has completed with the character "完" (wan 2), the basic meaning of the character is a state of completion or being finished. On the other hand, the character "wan" can also combine with other verbs with the form of "- wan" such as "吃完" "做完" which means the action of "eat" or "do" has completed. Therefore, the sentence "我吃完早饭了" also contains the implied meaning that the action "eat" happened in the past.

In terms of another meaning of the character "wan", it can also be used in the expression that is similar to perfect tense in English. Although there is no clear distinction between past tense and perfect tense, they have the same grammatical functions and logics as English: the past tense emphasizes the movement happened particularly in the past, while the perfect tense emphasizes the movement happened in the past and the movement is still going on till now or the influence of the past movement on this moment. In Mandarin, the time adverb "已经"which means already is used to indicate the semantics of perfect tense. Let us get back to the sentence "我吃完早饭了"which expresses past tense above, if "已经" is added in the sentence after subject "我"the meaning of the sentence changes from I ate breakfast into "我已经吃完早饭了"I have already eaten breakfast. These two sentences are relatively easy to distinguish due to the existence of the optional time adverb "已经". Although, the sentences that contain different implied meanings become the same one, it has no influence on communications and meanings. That is the reason why it is more important to analyze contexts and semantics than merely focus on forms in Mandarin and Chinese.

3. Cantonese

Introduction (The differences between Cantonese and Mandarin)

"The term dialect refers, strictly speaking, to differences between kinds of language which are differences of vocabulary and grammar as well as pronunciation" (Trudgill, P.5, 2000). China has 7 major dialects that appear in China which includes Mandarin, Hui, Jin, Hakka, Xiang, Cantonese, etc. (Zhang). Among these dialects, the largest differences are between Cantonese and Mandarin. First, Cantonese has 9 different tones, but Mandarin only has 4 tones. These 9 tones in Cantonese include High level tone, Mid rising tone, Mid level tone, Low falling tone, Low rising tone, Low level entering tone, High level entering tone, Mid level entering tone, Low level entering tone which can apply in any sound (Yip, Matthews, P.21, 1999). On the contrary, compared to other dialects, Mandarin has the fewest tones. These include the First

tone (high level), the Second tone (rising), the Third tone (falling rising), and the Fourth tone (falling). Second, Cantonese vocabularies and Mandarin vocabularies reveal huge differences. For example, in term of adjectives, Mandarin speakers tend to use proverbs to describe things, and Cantonese creates more adjectives than Mandarin because Cantonese speakers like to use a particular adjective for every trait using some intensifiers to set off the adjective, so it can give prominence to the characteristic of the things or people they are describing. Third, although Cantonese and Mandarin are both SVO (Subject-Verb-Object) languages fundamentally, their sentences are different when they contain a direct object and the comparison (Alderete, Chan, Chan, Fan, P.37)

People always argue about whether Cantonese is a dialect of the Chinese language or a separate language. It can be said that written Cantonese and written Mandarin share the same grammar format. However, Cantonese uses the traditional Chinese characters, while Mandarin uses the Simplified Chinese characters. Also, when they come to the spoken form, they are two totally distinct and separate languages offering distinct word choices and grammar. In the following, the grammar of spoken Cantonese will be introduced.

The Verb System of Cantonese

Even though the empty word "了 (liǎo)" in Mandarin includes the meaning of "already", it is not used alone. It is the same as the word "咗 (jo2)" in Cantonese. Cantonese speakers use the word "咗 (jo2)" with an action verb such as "食 (sik6, eat)", "做 (jou6, do)", and "玩 waan2/wun6, play)." "咗 (jo2)" indicates the meaning of past tense, so "食咗 (sik6 jo2, eat already)" and "做 咗 (jou6 jo2, do already)" means *ate* and *did*. Its usage is similar to 'ed' in the English language.

From (1) below, for example, we can say that the affix -ed contributes the meaning of past tense, modifying the verbal situational meaning contributed by the lexeme walk by attaching to the verbal lexeme. The past tense is contributed by a verbal affix in English, but by an adverbial in Chinese. We may assume that all the world's languages involve ways of providing information about situations, and that this reflects the structure of the brain that has evolved over millions of years. However, the world's languages have different ways of accomplishing this.

1.

Figure 4: Affix –ed in thelexeme walk

Apart from the word "咗 (jo2)", there are other words that also imply that an event or action is in the past. The difference between the word "咗 (jo2)" and "完 (jyun4)" is that the word "完 (jyun4)" in Cantonese has already implied the meaning of "complete," "finish," "settle," "whole". The word "完 (jyun4)" can be used independently and separated from the other words. It means "something is done" or "done something" when it is used alone. Assuredly, it can form the sentence with the other main verb (action verb). Taking the sentence "I ate lunch" as an example, in Cantonese "我 (ngo5, I) 食 (sik6, eat) 完 (yun4, complete) 飯 (faan6, rice)", "完 (yun4, complete)" is not a separating word, it is a past tense component of the main verb 食 (sik6, eat).

Table 2: Verbal Morphemes of eat

Tense	Meaning in English	Chinese Verb	Combinative Adverb	Meaning of the combinative Adverb/ Adverbial Phrase	Adverbial phrase
Present	Eat	食 (sik6)			
Present Perfect	Eating	食 (sik6, eat) 緊 (gan2)	1. 緊 (gan2)	1.Affix -ing 2.Now	2. 依家 (yi1 ga1)
Past	Ate	1. 食 (sik6) 咗 (jo2) 2. 食 (sik6) 完 (yun4)	1. 咗 (jo2) 2. 完 (yun4)	1.Affix -ed 2. Complete	
Future	Will eat	食 (sik6)		1.Later 2.Tomorrow	1. 一陣 (yat1 jan6) 2. 聽日 (ting1 yat6)

Cantonese has an empty word and some adverbial phrases to describe present perfect tense. "緊 (gan2)" is the empty word in the sentence "我 (ngo5, I) 食 (sik6, eat) 緊 (gan2) 飯 (faan6, rice)". "緊 (gan2)" cannot be used independently, but it implies the meaning of the affix -ing in the English language. Instead of adding the empty word "緊 (gan2)", adding "依家 (yi1 ga1, now)" is also having the function of the present perfect tense.

Cantonese does not have an empty word or other words for the future tense and present tense, whereas there are some adverbs/ adverbial phrases to let the listener know when the action is happening. For instance, the adverb "今日 (gam1 yat6, today)" and "聽日 (ting1 yat6, tomorrow)", and "一陣 (yat1 jan6, later)". The sentence "我 (ngo5, I) 一陣 (yat1 jan6, later) 去 (heui3, go) 食 (sik6, eat) 飯 (faan6, rice)" means "I will eat." The sentence above does not have a word meaning or equal to "will", but it still contains the future tense. Nevertheless, we have to notice that Cantonese also makes distinctions between tense and aspect. Although "今日 (gam1 yat6, today)" is in the sentence "我 (ngo5, I) 今日 (gam1 yat6, today) 食咗 (sik6 jo2, eat already) 飯 (faan6, rice), I ate today", it does not mean this action happens in the present; it happened in the past.

Since Cantonese is not an alphabet language and it is using the Chinese traditional character, it is difficult to determine whether "食咗 (sik6 jo2 , eat already)," "食 (sik6, eat) 完 (yun4, complete)" is a verb or a verb phrase. However, it is definitely impossible to separate these verb/verb phrases because they need each other to help the speaker to express their meaning. In the case of past tense: if the sentence without the word "食 (sik6, eat)", the listener would not understand the main action of the sentences. On the other hand, if the sentence without the word "咗 (jo2)" or "完 (yun4, complete)", the listener would not know the time of when it happens. Present perfect tense in Cantonese is using the empty word "緊 (gan2)" to imply the affix -ing. In the case of the future tense and present tense, the listener would not know the time aspect if the adverbial phrases/ adverb get removed. Also, the foundation of the verb/ verb phrase is that the "time verb" or the empty word which describes the time is always following the main word (action verb). Therefore, the action verb and the "time verb" are both important in a Cantonese sentence.

4. Japanese

Introduction

According to an online module of Tokyo University of Foreign Studies, Japanese is spoken by as many as 126 million people domestically, and 800 thousand people in countries like Hawaii, Taiwan, South Korea and so on. These countries are where Japanese immigrants settled in or colonized by Japan in the first half of the 20th century. As for the origin of Japanese, there is no established theory to this day. Although Japanese was considered to be a language isolate (a language without a family) for many years, Japanese is recently placed in a language family together with the Ryukuan languages, spoken on the Amami and Ryukyu Islands to the far south of Kyushu, and Hachijo, spoken on Hachijo Island (Irwin & Zisk, 2019).

Understanding the Japanese Verb System

Verbs are important in any language. However, a website of center of Japanese Language Education of Tokyo University reports verb especially plays an essential role in the Japanese language because various elements which indicate potential form, causative form, passive form, negative form, progressive form, modality, tense and so on, are attached after verb. For example, we can put an element, "mashita" after the base form verb "nomu" to create "nomimashita" (polite way of saying "drank"). Also, mashita can be broken down into two parts, "mashi" and "ta". "Mashi" indicates politeness, and "ta" is a past form, indicating the completion of action.

Table 3. Analysis of nomimashita

nomi	mashi	ta
Verb in base form: 'to drink'	Shows politeness	Past form

According to the website of center of Japanese Language Education of Tokyo University, in English, only elements which indicate tense, (such as -ed), progressive form (-ing), and plurality (-s) come after verb. Elements like "not", "can", "may" are put somewhere else. But in Japanese, these all come after verb. Of course, more than two elements can be added to a verb. Let's consider this example, "nomasarenakattahazuda" (must not have been made to drink). As many as five elements are put after the verb "nomu". They are causative form, passive form, negative form, past form and modality.

Table 4. Analysis of nomasarenakattahazuda

noma	sa	re
Verb in base form: 'to drink'	Causative form	Passive form
na	katta	hazuda
Negative form	Past form	Modality: showing speaker's speculation. It equals English "must."

This kind of language is known as agglutinative language. Also, when more than two elements are added to a verb, they are arranged in order. The fact that various elements can come after the verb is one of the characteristics of Japanese.

Next, conjugational forms of taberu (to eat), kaku (to write), kuru (to come) will be discussed. Iori (2001) points out that the conjugation table of school grammar is problematic and created ideal conjugation tables himself. Conjugation table, shown below, is based on Iori's table. Conjugation table of school grammar consists of six forms: Mizenkei, Rentaikei, Shushikei, Rentaikei, Kateikei, Meireikei.

Ending form can be used on its own. And Te-form can follow iru, which is progressive form, to create "teiru" (-ing). Also, Ba-form is hypothetical. Finally, Tara-form is conditional and Tariform is exemplification or repetition of action.

On the conjugation table of taberu, you can see "tabe" is common in all conjugational forms. Also, to change a verb to a polite form, masu is put after the verb. And "ta" is added after a verb to show the action took place in the past (Kazama et al., 1993). However, because "kuru" is an irregular verb, conjugation forms do not have a common part. Moreover, generally speaking, structure of conjugation is "stem plus ending" (tabe plus ru makes taberu). But for ending forms, stems can be used on their own such as in case of tabe, kaki and ki (Kazama et al., 1993). This means they don't have an ending.

Table 5. Analysis of eat

FORM	taberu	kaku	kuru
Base form	Tabe	Kak-i	Ki
Simple present form	Tabe-ru	Kak-u	Ku-ru
Polite form	Tabe-mas-u	Kak-imas-u	Ki-mas-u
Past form	Tabe-ta	Kai-ta	Ki-ta
Negative form	Tabe-na-i	Kak-ana-i	Ko-na-i
Passive form	Tabe-rare-ru	Kak-are-ru	Ko-rare-ru
Causative form	Tabe-sase-ru	Kak-ase-ru	Ko-sase-ru
Potential form	Tabe-rare-ru	Kak-e-ru	Ko-rare-ru
Imperative form	Tabe-ro	Kak-e	Ko-i
Volition form	Tabe-you	Kak-o	Ko-yo
Te-form	Tabe-te	Kai-te	Ki-te
Ba-form (Hypothetical)	Tabe-reba	Kak-eba	Ku-reba
Tara-form (Conditional)	Tabe-tara	Kai-tara	Ki-tara
Tari-form (Conjunctional)	Tabe-tari	Kai-tari	Ki-tari

5. Tagalog

Introduction

With more than 100 languages spoken in the Philippines, the task of developing a national language was indeed extensive. The process began in 1935, when former President Manuel L. Quezon undertook the task of developing a language to unite the islands (Belvez, n.d.). Of the eight major languages spoken in the Philippines, it was elected to use Tagalog as the basis of the national language, as manifested in the former president's speech in 1937 (Presidential Museum and Library, 1937). Finally, the national language of the Philippines was settled in Article 14 of the 1987 Philippine Constitution:

"Section 6. The national language of the Philippines is Filipino. As it evolves, it shall be further developed and enriched on the basis of existing Philippine and other languages" (Official Gazette)."

Filipino, the national language, is then based on Tagalog, one of the main languages spoken in the Philippines. This would also indicate that the same verbal morphology would be used in Filipino as in Tagalog. Filipino, though, is seen as a separate language from Tagalog in the sense that people who speak Filipino may not necessarily understand Tagalog, while people who speak Tagalog may more or less understand Filipino.

Understanding the Tagalog Verb System

In the case of finite verbs in the Tagalog language, aspect and voice play major roles

semantically. As the studies of aspect and voice are extensive, the main focus would be on the relationship between aspect and verb form, as this is what is compared with Cantonese, Mandarin, Japanese, and English.

A wide array of affixes, including prefixes, suffixes, and infixes, are used in order to understand Tagalog verbal morphology, including, but not limited to: i-, ma-, mag-, magpa-, magka-, magma-, maki-, makipag-, mang-, pag-, -an, -in, -um-. A verb can change its form using multiple affixes, this altering the meaning of the verb. Take the verb "eat" in the Tagalog language: kain.

Table 6. Kain and its Aspect forms

	Verb form + nonfinite	Verb form + finite + haven't begun	Verb form + finite + begun + not completed	Verb form + finite + begun + completed
Kain	Kumain	Kakain	Kumakain	Kumain

For this verb, the infix -um is used to determine aspect. The verb itself is in the active voice as an agent is required to form a complete sentence. The second column shows the verb as nonfinite, which can also be seen as a "basic form" (Reid, 1992). The infix -um thus precedes the vowel of the verb form. In column 3, the first syllable of the verb is duplicated to show that the action is yet to be done. By adding the infix -um to the duplicated first syllable, column 4 shows the verb in the present form. Lastly, the final column shows the verb form in the past tense by adding the infix -um and using the finite form of the verb.

Using affixes as well as duplication is a common theme in Tagalog verbal morphology. As stated before, one verb form may use various affixes to denote change in meaning. Kain can then be used as follows:

Table 7. Kain using the suffix -in

Verb	Verb form + nonfinite	Verb form + finite +	Verb form + finite + begun	Verb form + finite +
form		haven't begun	+ not completed	begun + completed
Kain	Kain in	Kakainin	Kinakain	Kinain

The suffix -in adds the element of an object being eaten, as in "eat an orange," as well as the subject eating it, as in "John eats." This is similar to the -um- infix but adds more emphasis to the object than the doer.

Table 8. Kain using prefix pina-

Ver		Verb form + finite +	Verb form + finite + begun	Verb form + finite +
form		haven't begun	+ not completed	begun + completed
Kain	Ipina kain	Ipapa kain	Ipinapa kain	Ipina kain

The prefix *i*- is used when something ought to be done rather than doing something else. The prefix *pina*- denotes that someone is "allowed to" or "let to" do something, in this case, this may either mean "I let them eat" or "I fed them."

Table 9. Kain using prefix pa- and suffix -in

Verb form	Verb form + nonfinite	Verb form + finite + haven't begun	Verb form + finite + begun + not completed	
Kain	Pa kain in	Papakainin		

The previous verb form is similar to verbs using *pa*-verb-*in*. They differ in that in the former, the doer (the person allowing others to eat and/or the person feeding them) may be the speaker or somebody else. The latter is more imperative, in the sense that although permission is needed, that permission comes from the speaker, and the speaker is commanding others or themselves to "let them eat or feed them."

Table 10. Kain using prefix magpa-

Verb form	Verb form + nonfinite	Verb form + finite + haven't begun	Verb form + finite + begun + not completed	
Kain	Magpakain	Magpapakain	Nagpapakain	Nagpakain

The prefix *magpa*- is used when the speaker enables someone, themselves included, to do something, in this case eat. The denotation of *magpakain* is to let someone or something eat, but its connotation is broad. In everyday conversation, *magpakain* can mean "hold a feast." It means that there is a doer who intends to feed other people (receivers).

Analysis of Verbal Morphology Across Languages

It is indeed interesting to find that although historically, Japanese, Mandarin, Chinese, English, and Tagalog have different foundations, there still appear some similarities in terms of verbal morphology. Japanese, Mandarin, Cantonese and Tagalog all use affix-like morphemes. Although, Japanese solely uses suffixes, while Tagalog uses prefixes and infixes as well. It too is interesting that the Asian languages have certain forms that cannot be replicated exactly in English. These forms tend to focus on the *other*, akin to the general collectivism typically associated with Asian cultures. In Philippine culture, what is deemed as important (such as family and others) may be different compared to Western cultures. This may be why the Filipino verb forms seem to involve *others* more apparently than their Western counterparts. Culture is then built into the verb; i.e., the status of the speaker, who is speaking, the features of cultural learning are all reflected in the language.

Another similarity between Japanese and Tagalog would be the dependency of the base form of verbs. The base forms cannot be used on their own (such as *tabe* in Japanese and *kain* in Tagalog). One cannot say: "Tonkatsu wo tabe". *Tabe* would then need a suffix to indicate aspect as well as voice. However, Tagalog does allow the use of the base form in verbal Tagalog (casual). Verbally, Tagalog speakers can say, "Kain tayo!" which means, "Let's eat!" In written Tagalog, the base form *kain* would need the infix -um- to make *kumain*.

Finally, it seems as though Tagalog does have some traits similar to English but uncommon with Japanese, Cantonese, and Mandarin. Japanese, Mandarin, and Cantonese (since Chinese languages have no aspect), do not have future aspect, Tagalog and English do. In order for Mandarin, Cantonese, and Japanese to express future aspect, adverbials are used to show time.

6. Conclusion

There is evidence (Nisbett, 2003) that western children learn nouns faster than verbs, and that the opposite is true for east Asian children. There are clear differences in perception between cultural groups. Westerners tend to focus on the foreground, main protagonist while Asians are more in tune with context. Even so, there is a foundational psychic unity for all human beings and this is reflected in language. Human beings see the world in terms of situations and objects, and human language maps onto this fundamental template. This would be expected given that human language has been co-evolving (Deacon, 1999) with the brain over as much as five million years. Our basic idea here is that morphological elements, such as affixes or adverbs, contribute meaningful information. Therefore, while there are big differences in structure between the world's languages, the end result in terms of meaning is essentially parallel.

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都留文科大学大学院紀要 第26集 (2022年3月)

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